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ABSTRACT

This report reviews programs of individualized instruction in the basic skills of mathematics, language arts, science, and social education as well as in new curriculums which foster the skills needed for social education as well and emotional growth. The development and operation of an experience-based model for career education is described, and a new project dealing with planning schools for the future is discussed. The document also reviews programs which focus on the training of school administrators in planning, management, and evaluation procedures for systematic educational change. The publication includes a utilization survey of instructional products created by Research for Better Schools and a budget breakdown. (Author/DN)

RESEARCH FOR BETTER SCHOOLS INC.

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PROGRESS REPORT JUNE 1974

REACHING OUT...

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MESSAGE FROM THE EXECUTIVE DIRECTOR

June 1974

To the Board of Directors
of Research for Better Schools, Inc.

Research for Better Schools, Inc. continues to have a substantial impact on the quality of American education. Today, over 154,000 students, 5,700 teachers, and 800 schools are taking part in our research and development activities.

1973 marked the completion of our first year under the primary sponsorship of the National Institute of Education. With NIE support, the laboratory has been able to pursue its basic mission of restructuring education with emphasis on individualizing and humanizing the learning process. We have concentrated on developing products that will not only optimize opportunities for intellectual growth, but also promote self-reliance, responsibility, and responsiveness to changing social and technological environments. Also, we have stepped up our activities in the field, cooperating with school districts, private industry, commercial publishers, and a number of government agencies and institutions in the implementation and dissemination of RBS programs.

Let me take this opportunity to briefly review for you our investigation of the total educational process. This includes the development, testing, and dissemination of programs of individualized instruction in the basic skills of mathematics, language arts, science, and social education as well as in new curricula which foster the skills needed for social, intellectual, and emotional growth.

An on-going RBS activity has been the development and operation of the Academy for Career Education. The experience-based model, now in its second year, is training secondary students to become successful participants in a career of their choice. The Academy has drawn positive responses from both students and employers.

Another RBS focus has been on the training of school administrators in the planning, management, and evaluation procedures for systematic educational change. Our management training packages are helping school districts inventory local strengths and weaknesses, plan the implementation of a chosen innovation, make the organizational and role changes necessary for its success, and guide and evaluate its adoption.

Planning Schools for the Future is a new project initiated during the past year. RBS' national symposium, held in October 1973, explored what educational research and development can do to set clear and defined directions for education in the decades ahead. The symposium drew over 400 participants from across the country and laid the groundwork for a three-year investigation of educational futures.

While RBS has continued to grow with primary support from NIE, other agencies and institutions have also contributed to increased program activity. Research and development activities are under way with the New Jersey Division of Correction and Parole, the U.S. Naval Training Command, the Office of Child Development, the National Science Foundation, the National Center for Educational Technology, and the IBM Corporation.

Also, three more RBS products have been accepted for commercial publication. They include: the Individualized Spelling Program published by the Follett Publishing Company, the "Handbook of Comprehensive Planning in Schools" published by Educational Technology Publications, and the Achievement Competence Training package published by the Webster Division of the McGraw-Hill Publishing Company.

All of these ventures have contributed to an improved learning environment through research and development. Proudly, we present the following report as evidence of our efforts.

Robert G. Scanlon

Robert G. Scanlon
Executive Director

A SURVEY OF UTILIZATION OF RBS INSTRUCTIONAL PRODUCTS

Program	Schools	Teachers	Students
IPI Math Edition II	347	2,962	92,000
Middle School Math Extension	2	8	240
Individualized Science	152	520	15,600
Individualized Reading	76	995	28,028
Individualized Spelling	33	410	11,418
Science Curriculum for Individualized Learning	1	1	210
Achievement Competence Training	44	58	1,700
Language of Personal Experience	2	10	260
Making Judgments	10	31	1,142
Social Encounter and Research Curriculum for Humanization	1	2	90
Systematic Progress in Reading and Literature	1	2	150
Library Reference Skills Curriculum	1	1	150
School District Planning Guide	6	17	N/A
Educational Project Management Instructional System	139	595	N/A
Indicators of Performance	22	152	6,200
Career Education	2	12	150
Individualized Learning for Adults	19*	N/A	1,000
	838	5,773	153,850

*Includes High Schools, Alternative Schools, Community Centers, Prisons, a Military Training Site, and a Junior High School.

4/74

RBS STUDIES THE FUTURE OF EDUCATION

PLANNING SCHOOLS FOR THE FUTURE

A major new project initiated by RBS in 1973 is a three-year study culminating in the development of plans and model designs for schools and curriculum for the future. This involves systematic research into what student needs will be in 1985 and then setting a clear and defined direction for education so that schools can meet those needs.

As a first step toward this goal, in October RBS conducted a three-day symposium where eight of the country's leading social scientists and educators presented their views on what the alternative futures of our society might be and the implications of those futures for education. Speakers included Daniel Bell, Kenneth E. Boulding, Robert Glaser, Harold D. Lasswell, Louis Rubin, Harold G. Shane, Patrick Suppes, and Ralph W. Tyler.

Symposium speakers did not attempt to prescribe a formula for schools. Rather, they identified a number of trends, now shaping society, which will have a profound effect upon schools in the next decade. These include: (1) greater citizen involvement in public decision-making; (2) an increase in conflicting demands made in the name of group rights; (3) emergence of "social drawing rights," including the right to a certain number of years of schooling to be drawn upon at will; (4) increasing tendency for education to compete with numerous other demands upon the public treasury; (5) increasing demands for diversity and choice in public institutions; (6) changing life-styles which reflect a shift in values from materialism to personal fulfillment; and (7) expotential growth of knowledge.

A vital concern expressed by symposium participants was the lack of an open forum in which educational practitioners can share experiences and weigh their own efforts and goals against a broader and more varied national spectrum.

In response to this need, RBS is creating a consortium of schools, school districts, and other agencies to assist in planning for the future. RBS will survey their present practices and provide a communications network through which schools will be able to analyze their own activities in relation to what other educators are doing.

In essence, the laboratory will become a clearinghouse for educational innovation on a nationwide level. Results of the consortium surveys will be reported periodically at various meetings, as well as in a newsletter.

Based upon the information gathered from schools, RBS will then proceed to formulate a set of detailed specifications for alternative education centers that provide an adaptive and personalized education for each and every student. Implicit in these designs will be provisions for individualized instruction, affective education, technology-assisted instruction, community participation, and any other elements that research shows can contribute to effective schools for the eighties.

"We will need a curriculum based upon more active and less inert knowledge . . . that emphasizes the skills of decision-making . . . that provides experiences which serve as training in the formulation of values . . . that teaches the young the devices through which consensus is obtained on significant political issues . . . that outlines the potential dimensions of a rewarding life style."

Louis Rubin

"The line between schooling and other agencies will be changing undoubtedly in the future but the school will not disappear."

Ralph W. Tyler

"A clear implication for education is that, in the nature of a post-industrial society, there is the need for the centrality of conceptual inquiry as the grounds of knowledge. One cannot teach subject matter, because subject matters erode very quickly."

Daniel Bell

EDUCATIONAL TECHNOLOGY

The need to more clearly understand potential applications of technology to education has led RBS to investigate a number of alternative technology-based instructional delivery systems.

A three-day symposium in August brought together university researchers, school teachers and administrators, government officials, and business and industry spokesmen to explore how new and advanced communications and technology-based systems can best be used. Ten presentations dealt with the economic costs and benefits, input-output, management, implementation, availability of technology, and human, social, and political factors. Funding for this symposium was granted RBS by the National Institute of Education and the U.S. Office of Education. A final report of the proceedings, "Improving Productivity of School Systems through Educational Technology," is available from RBS.

"As education proceeds as a lifetime activity, the school will, of course, become a lifetime civic center."

Harold D. Lasswell

From a symposium participant:

"The large majority of teachers are ready for technological approaches to teaching.

Under another contract with a major industrial firm, RBS has been working in association with the School District of Philadelphia on the design of a family of computer terminals for use in schools. Plans now call for RBS to develop the accompanying instructional system for a specific terminal.

New research and development projects under consideration include the development of a publication to stimulate use of technological innovations in secondary schools and, also, the development of an operational model of a technology-based school of the future.

TRAINING FOR CHILD DEVELOPMENT ASSOCIATES

RBS is working cooperatively with the Community College of Philadelphia and the School District of Philadelphia to develop a field-based, pilot training program to enable those persons already employed as aides or teacher assistants in Philadelphia's early childhood programs to become skilled and credentialled child care workers – Child Development Associates (CDA's).

Under contract with the Office of Child Development, the three co-sponsoring agencies are combining their expertise to design an individualized, modularized, and replicable training program directed toward the acquisition of specific CDA competencies. These competencies are derived from the knowledge, skills, and attitudes that are important for effective instructional performance in a classroom with three to five-year-old children. They include developing a framework for viewing child development, knowledge of instructional techniques, skills in self-evaluation, heightened capability to relate to others, and ability to relate children's home experience to school programs.

From a trainee:

"The CDA program lets me evaluate myself instead of having teachers always evaluate me."

The project's 25 trainees spend about 60 percent of their time in pre-school centers. Each trainee works with approximately 20 children. A CDA credential will be granted upon mastery of all specified competencies.

There is no required time period before a trainee can qualify as a CDA. Some trainees may qualify as competent after a short period of training while others may need more time. Maximum time spent in training toward the CDA credential will be two years.

RBS EXPERIENCE-BASED CAREER EDUCATION

THE ACADEMY FOR CAREER EDUCATION

The Academy for Career Education opened in 1972 as an experience-based career education model designed to explore ways in which employers can be involved in the educational process. Today, approximately 90 employers are helping high school students integrate academic learning with the world of work and supplying them with the necessary information from which to make a rational career decision.

Institutional relationships presently involve RBS, the Academy for Career Education, the Greater Philadelphia Chamber of Commerce, and the School District of Philadelphia. The Academy is a private, non-profit corporation with its own 20 member Board of Directors. It receives developmental and implementation support from RBS. About 70 twelfth grade students are attending the Academy full-time; another 67 tenth and eleventh grade students attend part-time under a release arrangement with Philadelphia's Olney High School.

All students participate in a core instructional program that has three major subdivisions: Career Development, Career Guidance, and Basic Skills.

Career Development consists of Career Exploration and Career Specialization. One goal of Career Exploration is to provide each student with firsthand experience in actual work settings. Students spend at least one full day each week at an employer site. These experiences are intended to help them acquire general knowledge and skills needed to improve their interaction with the economic sector through a series of structured explorations. The goal of Career Specialization is to provide for continued growth by extending student learning experiences into specific areas. Students in Career Specialization participate in an individualized, structured, and in-depth career learning experience at employer sites for one or two days a week.

Career Guidance consists of small group sessions and individual counseling. Primary focus is on life skills, academic motivation, the definition of tentative career goals, and for twelfth grade students – post Academy placement. Part of this component is a Life Skills Specialization activity where students participate in community service projects of their choice.

Basic Skills is designed to meet the individual academic needs of students in communications skills and mathematics. RBS' Individualized Learning for Adults is the primary instructional program used.

In addition to the core instructional program, the Academy provides a variety of offerings, called the Supplementary Program, to twelfth grade students. The Supplementary Program provides learning experiences which supplement the core instructional program to provide a comprehensive secondary education. Tenth and eleventh grade students take the equivalent instruction at their own high school.

The end result of this five-year developmental program is expected to be an operationally tested model of career education with an extensive set of curriculum materials and procedures, a knowledge base for evaluation, and a plan for replication and dissemination of the model.

From a student:

". . . being amazed at all you learned just because you were interested."

RBS CURRICULUM PROGRAMS

ADULT LEARNING

COMMUNICATIONS SKILLS FOR ADULT LEARNERS

Individualized Learning for Adults – Communications Skills (ILA Communications Skills) concentrates on the systematic development of reading ability. It is organized into ten areas divided into eight levels of difficulty. Areas include phonic analysis, handwriting, structural analysis, vocabulary development, literal comprehension, evaluative comprehension, library skills, organizational skills, and reference skills. Entrance tests determine the appropriate starting level for each student in each area. Pretests and posttests plot the learner's route through the instructional materials.

ILA Communications Skills is made up of 120 booklets, one for each performance objective. Each booklet contains two evaluative skill tests to monitor the student's progress. The booklets are supplemented by 54 cassette tapes to give audio support as needed.

Secondary students using ILA Communications Skills as the baseline instructional system have gained an average of .8 years on the California Test of Basic Skills: Reading subtest after five months instruction.

MATHEMATICS FOR ADULT LEARNERS

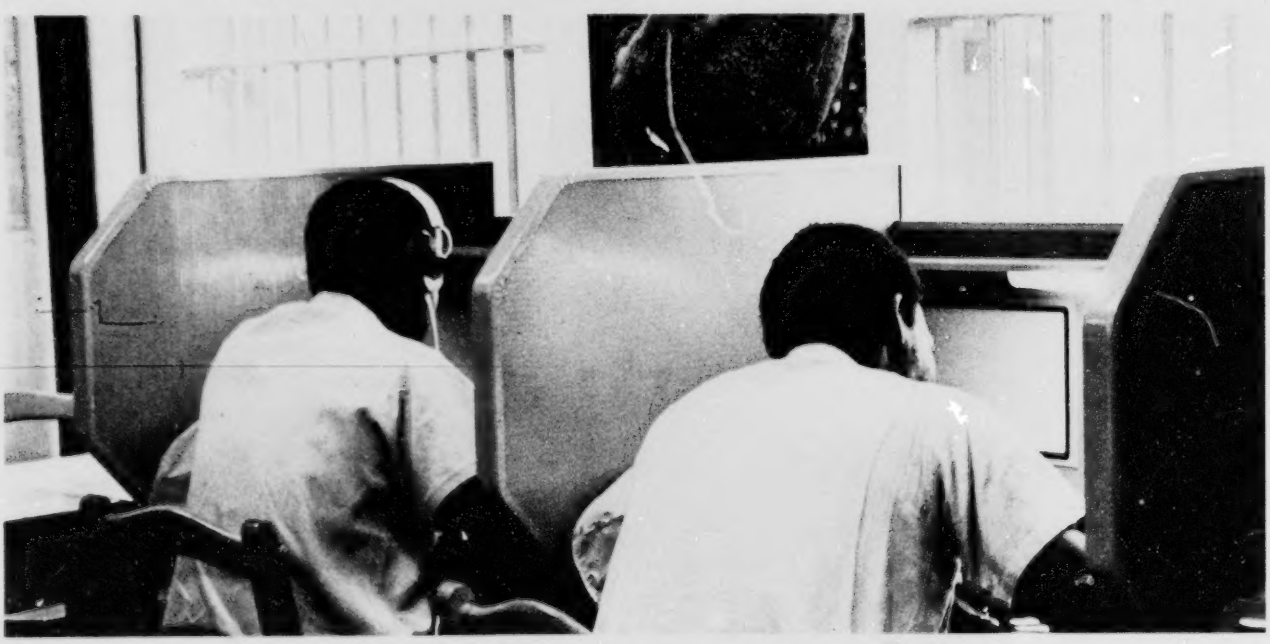
Individualized Learning for Adults – Mathematics (ILA Mathematics) is an adult mathematics curriculum consisting of a carefully structured continuum designed to lead the learner to an approximate ninth grade mathematics skills level. It is organized into five areas: numeration/place value, addition/subtraction, multiplication/division, geometry/measurement, and applications. Within each area, the learning sequence is specified by behavioral objectives, divided into eight levels and arranged in ascending order of difficulty. Entrance tests sample the student's performance in each area.

The ILA Mathematics student is given prescribed learning activities for each objective until mastery is achieved. These activities are organized into convenient booklets, each with two evaluative skill tests which monitor the learner's progress through the booklet. Criterion-referenced tests include entrance tests, unit pretests, and skill tests.

ILA has been successfully used in numerous adult education centers and high schools throughout the United States. A recent evaluation of ILA Mathematics showed that after five months of instruction, secondary school students using ILA Mathematics as the baseline instructional system gained an average of .3 years on the California Test of Basic Skills. The program has also shown that it can adequately prepare students for the mathematics skills needed to pass a General Educational Development Examination.

From an ILA student:

"I like working at my own speed."



NAVAL RECRUITS LEARN WITH ILA

This year RBS completed a pilot remedial education program using the ILA materials and management system with 49 naval recruits at the United States Naval Recruit Training Center in Orlando, Florida. The project was carried out under a contract with the United States Naval Training Command.

An evaluation study conducted at the project's completion indicates that the recruits did show significant improvement in reading skill. Men who had not mastered the sound-symbol relationships of the English language before entering the ILA program required approximately 52 hours of work to raise their reading level by one year. Those who had mastered the sound-symbol relationship before entering ILA required approximately 25 hours of work to raise their reading level by one year.

INMATES LEARN WITH ILA

ILA programs in mathematics and communications skills are also being conducted under a contract with the New Jersey Division of Correction and Parole. The contract calls for RBS to assist in the implementation of ILA in six separate state correctional facilities. The combined population of these six units represents more than 90 percent of the total population of adult inmates in New Jersey.

The goal for many of the inmates in the correctional facilities is to successfully complete the General Educational Development Examination and receive a High School Equivalency Diploma. ILA has helped effectively prepare students for the examination by averting unnecessary instructional hours on areas in which the individual learner already possesses competency and by designating the lower competency areas in which the student needs further instruction.

ILA is of particular value to inmates who very often need immediate satisfaction through success-oriented activities. In ILA, they can see their success as they work through a particular continuum. Also, the inmates are attracted by the practical nature of the ILA materials.

From an ILA student:

"Some of this stuff is pretty hard and I don't know how I'm doing it, but somehow I *am* doing it."

From a prison official:

"You don't start a man at 2+2 = 4 when he already knows that 2x8 = 16."

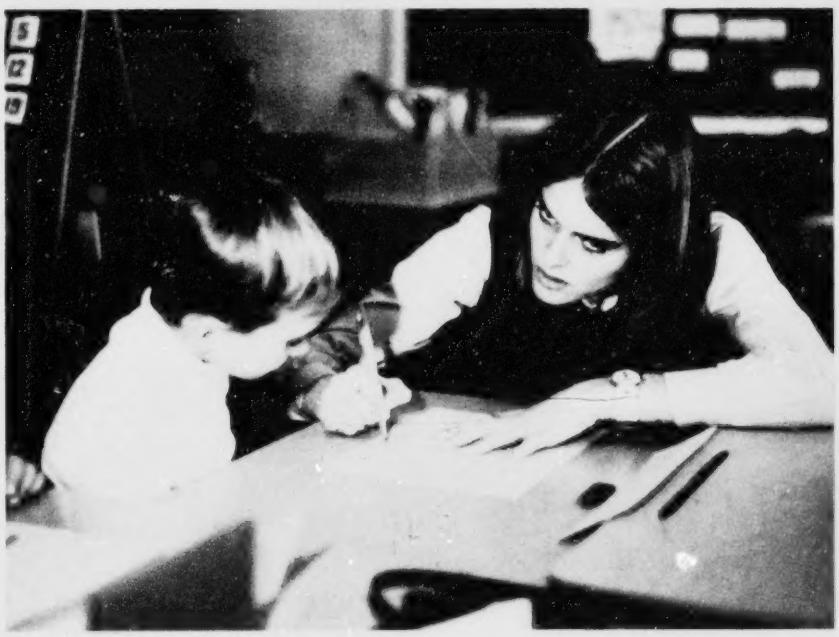
K-8 LEARNING

IPI MATHEMATICS

IPI Mathematics is an individualized, student-oriented instructional program for grades 1-6 developed by the Learning Research and Development Center at the University of Pittsburgh and tested and revised by RBS. It was made commercially available by Appleton-Century-Crofts, a division of the New Century Education Corporation, in September 1972.

The program is built around a continuum of 359 instructional objectives grouped into ten learning areas. Built into the system are diagnostic tests, learning resources, and management aids that facilitate achievement of the objectives. To prevent repetition of already mastered skills and to help isolate areas of particular difficulty, IPI Mathematics includes placement tests, curriculum-embedded-tests, and posttests. Self-instructional booklets, precisely written to match the program's instructional objectives, enable students to work independently at learning tasks geared to their own individual capacities and needs. Audio tapes for selected lower-level objectives guide students through the booklets and provide additional instruction.

IPI Mathematics can be used in a variety of school settings serving a



diversity of student populations. Currently, there are over 92,000 students in 45 states using IPI Mathematics. Recent evaluation studies have shown that parents of IPI students perceive their children as becoming more highly motivated, more independent, and more self-directed. IPI teachers have also indicated a more positive attitude toward the teaching of mathematics than their control group counterparts.

From a teacher:

"What IPI allows us to do is to reach the needs of the child on his own ground without having to force him into a great middle group."

INDIVIDUALIZED MIDDLE MATHEMATICS

Individualized Middle Mathematics (IMM) extends the elementary IPI Mathematics program through content typically taught in the seventh and eighth grades. Based on an analysis of existing junior high school mathematics materials, approximately 180 behaviorally-stated learning objectives divided into seven topic areas are being added to the original hierarchy of skills in IPI Mathematics.

IMM topic areas are Foundations, Integers, Rationals and Reals, Geometry and Measurement, Probability and Statistics, Equations and Inequalities, and Applications.

Included in the program are diagnostic and evaluation instruments, self-instructional booklets, student activities, management records and forms, and a teacher preparation program. Manipulable materials are included for objectives for which they are particularly appropriate, such as Geometry and Measurement, and Probability and Statistics.

Once the placement test has helped to identify the particular units appropriate for the student's study, the teacher and student may, within certain guidelines, select the particular unit the pupil wishes to study next.

IMM materials are being tested at the urban Rhodes School in Philadelphia and the suburban Haddon Township High School in Haddon Township, New Jersey.

Lessons produced thus far have been favorably received by students and teachers in both settings.

From a seventh grader:

"I like it the way it is. I don't think you should change it."

INDIVIDUALIZED SCIENCE

Individualized Science (IS) is a multimedia K-8 science program that involves students in the process of discovery. It is being developed at the Learning Research and Development Center at the University of Pittsburgh. RBS is field-testing the program and developing an IS teacher preparation package. Levels A-E are available from the Imperial International Learning Corporation.

A total of 34 units, divided into seven levels, assists the student to achieve the program's five goals: (1) student self-direction; (2) student co-evaluation; (3) informed attitudes toward science; (4) inquiry skills; and (5) scientific literacy.

Each unit in the program has been named after a scientist who has made some contribution to the specific area covered in that unit and includes a sound filmstrip on that person's life. Units may be either Mainstream Units containing required basic core information or Alternative Pathways where students expand or extend their Mainstream experiences or pursue independent study.

One unique feature of the program is its emphasis on the cultural aspects of science, the interaction of science with society, and with the children's expressed interests.

IS program materials include audio tapes, filmstrips, books and other printed materials, games, and manipulatives. Convenient carts store and transport program materials from one classroom to another as needed.

New this year is a "Metric Measurement" program for grades 3-6, in which students learn to measure length, volume, temperature, and mass using the appropriate metric units. Upon RBS' recommendation, the publisher is now packaging this unit separately from the IS program for schools requiring a unit on metric measurement only. Also being offered separately is a "Men and Ideas" sound filmstrip series on the lives of the scientists who have contributed to the scientific content of each IS unit.

The Hillside Elementary School in Berwyn, Pennsylvania, the Buckingham Elementary School in Buckingham, Pennsylvania, and the Gray Elementary School in Wilmington, Delaware are actively cooperating with RBS in field

From a principal:

"Parents have been amazed at the new interest their children have shown in science. Teachers have been extremely enthusiastic about the ways in which *all* students are able to achieve; and the children themselves show great eagerness to work with the science activities (many pleading to stay after school so that they can continue with the activities started during the day)."

testing IS. There are approximately 150 elementary schools using the program.

Achievement results from a sample of approximately 600 first and second grade students in three schools using IS and three control schools showed that IS students scored, on the average, at least as well as their control school counterparts at the first grade level. At the second grade level, the average IS scores were significantly higher than those of the respective control groups in every school setting. A second study, comparing the mean scores of IS and non-IS students on each of four attitude subscales, given as a pretest, revealed no significant differences. There were, however, significant differences in posttest subscores in favor of IS students on attitude toward school, attitude toward science, and attitude toward science professions.

SCIENCE CURRICULUM FOR INDIVIDUALIZED LEARNING

Science Curriculum for Individualized Learning (SCIL) is a K-6 program whose development is based on an existing group-oriented science program. It is RBS' intent to develop an individualized version of the group-oriented program, pilot test the new curriculum, and prepare it for the commercial market.

SCIL is built around a flexible sequence of activities geared to the student's expressed interests in both the physical and life sciences. The curriculum emphasizes the content and process of science via learning tasks correlated with instructional objectives. General scientific concepts are presented through individual workbooks, tapes, filmstrips, or film loops.

SCIL makes provisions for: (1) pupil diagnosis in terms of level of cognitive development; (2) lessons consistent with scientific knowledge and keyed to various levels of mental development; (3) freedom of choice; (4) differences in learning styles; and (5) differences in experiential background and rates of learning.

The SCIL instructional cycle involves exploration, invention, and discovery. Exploration lessons are open-ended and allow the child to become involved with concrete scientific objects in any way he wishes. Invention lessons are convergent activities which invent the scientific terminology and/or theoretical constructs in the program. Discovery lessons are problem-centered, divergent activities where knowledge of a theoretical construct is applied to a variety of situations different from that in which the construct was invented.

From a sixth grader:

"It's good because you can go right in and get to work. Also, a lot of things are just fun to do."

SCIL is now being pilot tested at Philadelphia's Greenfield Elementary School and in several schools in the Chicago area. Preliminary findings indicate that students are gaining competence in using scientific concepts. Also, SCIL students had a more positive attitude toward science class, science lessons, and what goes on in science class than did students in control groups.

SYSTEMATIC PROGRESS IN READING AND LITERATURE

RBS continued to build, this year, the instructional strategies and materials for Systematic Progress in Reading and Literature (SPIRAL).

SPIRAL is a literature-based individualized reading program for intermediate grades four, five, and six. It is being designed (1) to help the student understand and enjoy a wide variety of reading materials; (2) to teach, maintain, reinforce, and improve the basic skills of reading; (3) to help the student effectively apply acquired reading skills in pursuit of new knowledge; and (4) to provide the study skills to help the student meaningfully use this knowledge.

These objectives are accomplished through SPIRAL's three instructional components: Literature in the form of anthologies; Basic Comprehension Skills; and Application Activities. The instructional process combines independent, small group, and teacher

guided strategies to teach or reinforce the objectives.

A set of anthologies, each focusing on one of six central themes, encourages the student's appreciation of literature. Themes include: the supernatural; survival; ecology; animal and wildlife; moral decisions and problem solving; and self-understanding. This component of SPIRAL also helps the student build vocabulary and gives him practice in acquiring information through reading.

Self-instruction, practice, and evaluation in basic comprehension skills are given students through instructional modules. Each module is based upon a specific objective in three skills areas: syntax skills, developmental skills, and study skills.

Application activities are designed for individual students or small groups so that they can use the skills covered in the program. This component integrates reading skills with general language arts skills such as creative dramatics, listening, and writing.

Evaluation and prescriptive instruction are essential to all aspects of the SPIRAL program. Careful evaluation of skills places the student in the program and guides his learning. Simple record-keeping devices closely monitor the student's progress.

SPIRAL materials are being pilot tested at the McCall School in downtown Philadelphia.

From a fourth grader:

"In SPIRAL I read more books and I can read the whole story without exercises. I get a chance to read to myself. I don't like reading aloud. I love the skill booklets, they're interesting."

INDIVIDUALIZED SPELLING

Individualized Spelling, originally titled IPI Spelling, is based on a traditional classroom spelling series published by the Follett Publishing Company. Using the IPI prototype system, RBS added diagnostic tests, teacher training materials, and a management system to individualize the commercial program.

The testing component consists of 186 audio cassettes which enable the student to proceed independently and at a pace suitable to his or her learning abilities. Diagnostic tests include placement tests, pretests, posttests, review and final tests.

The program consists of five books (Books B, C, D, E and F) which correspond to traditional grade levels two through six. The books are divided into levels of words arranged by degree of difficulty. Levels are further subdivided into lists, which include word listings as well as word and sentence patterning activities that encourage students to make inductive generalizations about language patterns. Exercises in each list involve activities in composition, writing, and reading of the spelling words in context. In this way, the spelling program offers direct support to the total language arts program.

A recent questionnaire measuring the attitudes of students and teachers using Individualized Spelling and the attitudes of non-Individualized Spelling populations indicated that students using Individualized Spelling reacted more favorably to taking spelling tests, worried

From a teacher:

"It's uncanny, but these kids actually *want* to take tests. That's where they can see their progression."

less about time spent on lessons, and found spelling less boring than students taught by non-Individualized Spelling methods. Individualized Spelling teachers agreed that their teaching role is more effective, productive, and stimulating than that of a non-Individualized Spelling teacher. They also praised the alternative learning activities that are provided for students who do not achieve the intended outcome on their first attempt.

Approximately 12,000 students throughout the United States are using the program.

SOCIAL ENCOUNTER AND RESEARCH CURRICULUM FOR HUMANIZATION

Social Encounter and Research Curriculum for Humanization (SEARCH) is a Piaget-based individualized, interdisciplinary program of social education for grades K-3. It focuses on the interaction between the child and his personal, social, and cultural environments by addressing current social issues such as urban-suburban differences, personal and group identity, responsible citizenship, career and livelihood, ecological competency, and intellectual vitality.

SEARCH content is organized around five psycho-social life functions: (1) Self-Realizing; (2) Governing; (3) Producing and Consuming Goods and Services; (4) Utilizing Environments; and (5) Interpreting and Generating Ideas and Events. These functions reflect the fact that human action and awareness begin with a personal focus and expand, as cognitive development expands, toward a focus on all humanity.

The program includes a three-phase instructional strategy: Encounter, Research, and Action. The Encounter phase consists of activities that introduce a unit and concentrate on the development of the child's image and language for material in that unit. The Research phase emphasizes the active investigation and exploration of a particular problem. Action phase activities require the child to produce and demonstrate his knowledge of the concepts of the unit material by relating it to his own social reality and understanding.

SEARCH is in its second year of tryout at the Greenfield Elementary School in downtown Philadelphia. Preliminary findings have indicated that the instructional strategies used in SEARCH are effective and that the SEARCH materials are appealing to students.

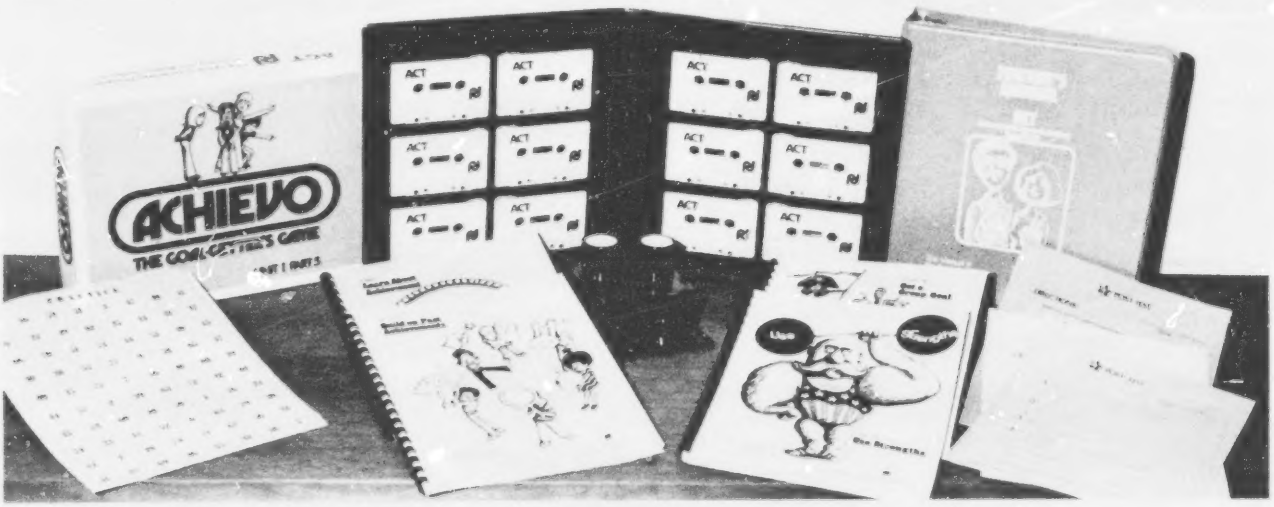
A new addition to the SEARCH program is STEP (SEARCH Teacher Education Program), also being tried out. STEP includes both a handbook and multimedia presentation to acquaint teachers with the strategies and procedures of the SEARCH program.

From a teacher:

"We are presently studying textbooks for next year's social studies in our school (K-2) and are not having much luck getting everyone to decide on a particular series. When I showed my principal SEARCH, he was delighted with it and left it up to us as to whether we could make do with what we're now using until SEARCH becomes available to the public."

ACHIEVEMENT COMPETENCE TRAINING

Achievement Competence Training (ACT) is a multimedia, partially programmed course designed to teach fifth, sixth, and seventh grade children a behavioral strategy which will enable



them to become effective in setting and achieving their own goals.

The heart of ACT is made up of a six-step strategy for achieving. In the first step, Study Self, students learn to state data regarding personal strengths and past achievements. In the second step, Get Goal Ideas, students learn to generate goal ideas which are related to personal data. In the third step, Get a Goal, they learn to formulate and commit themselves to a goal that is medium-risk, and specific in kind, time, and number. The fourth step, Plan, helps students to name and order tasks, seek information, and replan if necessary. In the fifth step, Strive, students employ affective techniques such as envisioning achievement, remembering past achievements, competing, and thinking about heroes. In the sixth step, Evaluate, students determine whether or not they have attained their goal, identify what was done well and what needs improvement, and identify growth in use of achievement skills.

A recent posttest evaluation of ACT indicated that ACT materials do teach the program strategy. A stringent scoring of the ACT Mastery Test, a criterion-referenced measure of course content, revealed an average student score of 24 out of a possible 36 points. The evaluation also showed that ACT does enhance internal control, and that students who had ACT set more realistic standards for personal achievement than did control students. Furthermore, ACT students were able to successfully transfer the strategy concepts to other simulated situations. They also showed an increase in positive self-evaluation.

ACT will be published and distributed by the Webster Division of McGraw-Hill Publishing Company in January 1975.

From a fifth grader:

"I think it was kind of fun because before I really didn't know what a goal was. But now I have a lot more goals like build a ship in a bottle. It gives more ideas on things to do."

THE LANGUAGE OF PERSONAL EXPERIENCE

The Language of Personal Experience Package is designed for children between the ages of ten and twelve so that they can systematically explore their own interpersonal relations and develop functional, testable, and open-ended inter-personal skills.

LOPE has three themes: describing personal reality, describing personal experiences, and describing personal experiences vs. expressing opinions. These themes give the learner the skills to attack questions such as: why do people act the way they do; what makes people different; why do people feel differently about the same thing; what are feelings?

The package begins with the student examining what makes up human experiences. Open lessons about emotional responses teach the learner a vocabulary associated with feelings and help him learn to use that vocabulary. Next, the student learns that feelings are reactions to what is happening around and inside him. He becomes able to differentiate between "self-sensations" and "other" sensations. A third component of human experience is judgment. The student learns that he not only has feelings in response to what he senses, he also has reactions to those feelings.

The LOPE curriculum package is organized into 25 sequenced lessons. For each lesson there is a separate audio tape and two pages of visual materials. Students listen to the audio tape and at certain intervals use a designated portion of the visual materials.

LOPE has been pilot tested by approximately 200 fifth and sixth grade students of the Devon Elementary School in Devon, Pennsylvania and Council Rock Intermediate School in Newtown, Pennsylvania. A larger field test of approximately 700 students in 12 schools is scheduled for this coming fall.

MAKING JUDGMENTS

Making Judgments is a skill-based instructional package in critical thinking for middle school age children. It presents concepts, rules, and strategies that are prerequisite for independent thought, decision-making, and problem-solving.

The package is made up of five units, each consisting of seven lessons. The units introduce standards for making judgments – specific principles, conventions, and criteria for assessing the reliability, relevancy, warranty, or sufficiency of information – within the context of life-like problem-solving ventures. The specific skills of discriminating, classifying, demonstrating the operation of a principle, and generating conditions by which information can be evaluated have potential use in other curriculum areas such as science or social studies.

Package materials include programmed lesson booklets with workbooks, games, and criterion-referenced tests. Lesson booklets are supplemented by teacher-led group activities.

Making Judgments is being field tested by 1100 experimental and control students in grades six, seven, eight, and nine. Preliminary data and anecdotal reports support the effectiveness of the combined programmed material and active inquiry approach in the instructional design.

RBS MANAGEMENT TRAINING PROGRAMS

HANDBOOK OF COMPREHENSIVE PLANNING IN SCHOOLS

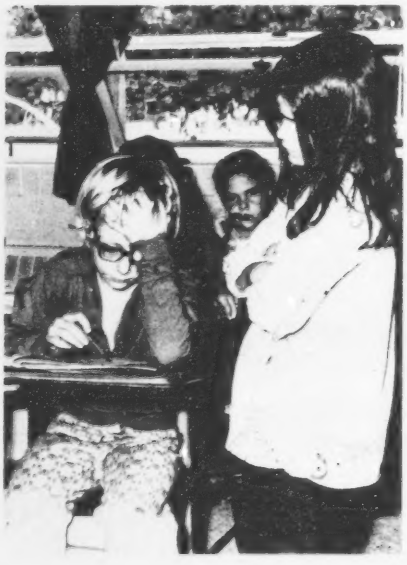
Handbook of Comprehensive Planning in Schools, formerly called "Indicators of Performance," is an instructional module that enables individuals within a school district to participate in activities that result in improvement for their own school programs. The module is based upon the identification of specific needs and objectives at the school district level and can be applied to any grade level and any subject area. It is flexible enough to give everyone involved – administrators, teachers, and curriculum specialists – an opportunity to contribute to district improvement by determining what the district is currently doing, how well it is doing it, and how its efforts can be improved.

The Handbook has been field tested by school districts in Pennsylvania, New Jersey, and Delaware. Evaluation reports indicate that (1) the materials are self-instructional and require no external assistance for successfully completing the process; (2) a group cohesiveness of district staff consistently emerges as a result of involvement; (3) participants are better able to organize the curriculum content and to communicate ideas to each other; and (4) extended use has led to the recognition of areas of concern and to the modification of curriçulum at the classroom, building, and district levels.

Handbook of Comprehensive Planning in Schools will be available this September from Educational Technology Publications, Inc.

From a teacher:

"I am sure I have become a better math teacher as a result of this study. I believe that other teachers will experience this same feeling after they have an opportunity to utilize the results of this research, but what is more important, I think that our students will receive a better education."



EDUCATIONAL PROJECT MANAGEMENT INSTRUCTIONAL SYSTEM

Educational Project Management Instructional System (EPMIS) consists of three training packages of self-study materials directed toward helping local school districts systematically acquire the basic knowledge and skills of project management. Its purpose is to provide local school personnel with learning experiences which will enable them to effectively plan and use a project management approach in initiating and carrying through their own educational projects.

Module I, Project Management Executive Orientation, introduces superintendents, administrators, school board members, and selected community leaders to the basic concepts of management.

Module II, Project Management Basic Principles, provides project managers with the basic knowledge, skills, and sensitivities needed to manage a project in a local educational setting.

Module III, Proposal Development, is designed to improve an administrator's knowledge and skills in the management and development of a project proposal. The module is intended for use by persons assigned the responsibility of securing resources to support the adoption of instructional changes.

A number of universities are offering courses which utilize EPMIS materials. Among them are Ohio State University, Xavier University, and the University of Rhode Island. In addition, Project Management Basic Principles has been selected by the Rhode Island Department of Education for statewide dissemination. Also, the National Institute of Education's Panel Review of Products selected Module II as an exemplary educational product in 1973.

All three EPMIS modules are available through RBS.

From a principal:

"Inasmuch as the skills developed by the program are those which basically would be used by coordinators and division directors, the material could be used as a course offering geared to teachers, vice-principals, and principals who are looking forward to moving into central office positions."

PUPIL PERCEIVED NEEDS ASSESSMENT PACKAGE

The Pupil Perceived Needs Assessment Package (PPNA) gives administrators, teachers, and other school personnel a systematic procedure for identifying educational needs as students perceive them. Six self-instructional units make up the package. These units detail how to plan a PPNA project, how to develop a PPNA indicator, how to process the data from a PPNA indicator, and how to analyze and report PPNA data. This type of data collection on pupil perceived needs can be used to: (1) sensitize classroom teachers to the needs of individual pupils; (2) collect baseline information on student perceptions of on-going classroom programs; (3) identify discrepancies which can be corrected at the building level; and (4) check the feasibility of current district policies.

Package materials include printed

matter and one cassette tape. They are designed for use by a small team of school district personnel.

PPNA has been tested on a limited scale and revised. A larger field test is now in progress.

From a superintendent:

"... this is an excellent instrument."

ROLE STRUCTURING

The Role Structuring module has as its goal to create an awareness among school administrators of the importance of human performance in planned change. It is designed to guide principals and central office administrators in developing new roles and relationships necessary for the implementation of innovative programs. The module enhances understanding of how human energies are employed in seeking organizational effectiveness.

Role Structuring consists of two volumes: the first volume provides a knowledge base; the second volume contains applications of the content of Volume I.

Participants in a recent pilot test, including educators from universities, state departments of education, and school districts, reacted very positively to the module. Although reviewers felt that this is not a training program in the typical sense of the word, they did think that the package achieves its purpose of creating an awareness of the personal dimensions of educational change.

The prototype is being revised on the basis of the pilot test. A broader field test is being planned for this fall. The module is expected to be available for general use by October 1975.

From a school district administrator:

"The module is both useful and essential; and if he knows it exists and what it is, every awake administrator will want to read and digest it."

AN ADMINISTRATOR'S HANDBOOK ON CURRICULUM EVALUATION

An Administrator's Handbook on Curriculum Evaluation, originally titled "School Evaluation Kit," is an individualized instructional package designed for use by school district personnel who are directing or involved in an evaluation project. Its objectives are to guide the administrator in (1) identifying the kinds of pupil outcomes that the district or school expects as a result of adopting a curriculum product; (2) selecting from a variety of available measuring instruments those which are most suitable for assessing the kinds of pupil outcomes that have been identified; (3) preparing an evaluation plan that includes a brief rationale, a listing of expected pupil outcomes, a listing of instruments to be used and reasons why each was selected, and a schedule for evaluation activities and costs; and (4) implementing the evaluation plan.

The Handbook contains an introductory cassette tape and three books. Book I and Book II give participants in the evaluation project information and guidance for the sequential completion of each task. Book III is directed specifically to the Project Manager. It outlines managerial responsibilities and guides the Project Manager in preparing schedules, planning, and monitoring the project.

The Handbook has completed a limited pilot test and is being revised for a broader field test in the fall. It is scheduled for release in summer 1975.

From a principal:

"It will help a school to come up with substantial, meaningful data to report to the community, to the administration, and to the Board of Education."

RBS BUDGET BREAKDOWN

Source of Funding	Percentage
National Institute of Education (NIE)	96.0
State of New Jersey	2.2
Office of Childhood Development (OCD)	1.0
National Science Foundation (NSF)	.6
IBM	.1
Department of Defense (DOD)	.1
TOTAL	100.0

Application	Percentage
Individualizing Learning Program (ILP)	29.7
Humanizing Learning Program (HLP)	23.5
Career Education Program (CEP)	21.6*
Administering for Change Program (ACP)	21.0
New Jersey Prisons	2.2*
Child Development Associates (CDA)	1.0*
Math	.6*
Training Leadership for Local Educational Change (TLLEC)	.2*
IBM	.1*
Navy Pilot	.1*
TOTAL	100.0

*These contracts overlap our fiscal year. The amount shown is pro-rated for FY 1974.

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Miami, Florida

Buckingham Elementary School
Buckingham, Pennsylvania

Burks County Intermediate Unit #4
Reading, Pennsylvania

Cedarbrook Junior High School
Wyncote, Pennsylvania

Cincinnati City Schools
Cincinnati, Ohio

Council Rock Intermediate School
Newtown, Pennsylvania

E. W. Rhodes School
Philadelphia, Pennsylvania

Erdenheim Elementary School
Philadelphia, Pennsylvania

Friend Public School
Friend, Nebraska

George Gray School
Wilmington, Delaware

Giant City School
Carbondale, Illinois

Greenfield Elementary School
Philadelphia, Pennsylvania

H. C. Frick Elementary School
Pittsburgh, Pennsylvania

Haddon Township High School
Westmont, New Jersey

Hamilton School
LaCrosse, Wisconsin

Hillcrest Junior High School
Erdenheim, Pennsylvania

Hillside Elementary School
Berwyn, Pennsylvania

James Sales Elementary School
Tacoma, Washington

Lake Park Elementary School
Lake Park, Georgia

Loller Middle School
Hatboro, Pennsylvania

Lower Salford Elementary School
Harleysville, Pennsylvania

McCall Elementary School
Philadelphia, Pennsylvania

Midland Elementary School
Tacoma, Washington

Neshaminy School District
Langhorne, Pennsylvania

Ocean City Elementary School
Ocean City, Maryland

Olney High School
Philadelphia, Pennsylvania

Paul A. Smith School
Franklin, New Hampshire

Penn Manor Elementary School
Erdenheim, Pennsylvania

Plymouth Junior High School
Norristown, Pennsylvania

Radnor Township School District
Wayne, Pennsylvania

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Redlake, Minnesota

Robert Hill Lane Elementary
School
Los Angeles, California

Springfield School District
Oreland, Pennsylvania

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